

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1-52. (Canceled)

53. (Currently amended) A nucleic acid including, in 5' to 3' orientation,

(a) a splice acceptor site;

(b) a cassette including, in any order, a negative selection marker and a positive selection marker, wherein said negative selection marker, said positive selection marker, or both are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell;

(c) a translation stop sequence,

(d) an internal ribosome entry site, and

(e) a reporter gene; or

~~(a) a splice acceptor site; and~~

~~(b) a cassette including in any order, a negative selection marker, a positive selection marker, an internal ribosome entry site, and a reporter gene, wherein said positive selection marker and reporter gene are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell; or~~

(a) a splice acceptor site;

(b) an internal ribosome entry site; and

(c) a cassette including, in any order, a negative selection marker, a positive selection marker, and a reporter gene, wherein said reporter gene and said positive

selection marker are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell; or

- (a) a splice acceptor site;
- (b) an internal ribosome entry site; and
- (c) a cassette including, in any order, a negative selection marker, a positive selection marker, and a reporter gene, wherein said negative selection marker and said positive selection marker are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell; or
- (a) a splice acceptor site;
- (b) a reporter gene;
- (c) a translation stop sequence;
- (d) an internal ribosome entry site; and
- (e) a cassette including, in any order, a negative selection marker and a positive selection marker, wherein said negative selection marker and said positive selection marker are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell; or
- (a) a splice acceptor site; and
- (b) a cassette including, in any order, a negative selection marker, a positive selection marker, a reporter gene, and a recombinase signal sequence, wherein said positive selection marker and said negative selection marker are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell.

54. (Currently amended) A nucleic acid including, in 5' to 3' orientation,

- (a) a splice acceptor site;

(b) a cassette including, in any order, a negative selection marker and a positive selection marker,

- (c) a translation stop sequence,
- (d) an internal ribosome entry site, and
- (e) a reporter gene.

55. (Currently amended) A nucleic acid including, in 5' to 3' orientation,

- (a) a splice acceptor site;
- (b) a cassette including, in any order, a negative selection marker and a reporter gene;
- (c) a translation stop sequence,
- (d) a promoter,
- (e) a positive selection marker;
- (f) a translation stop sequence; and
- (g) a polyadenylation signal.

56. (Currently amended) The nucleic acid of claim 53 including in 5' to 3' orientation,

- (a) a splice acceptor site;
- (b) a cassette including, in any order, a negative selection marker and a positive selection marker;
- (c) a translation stop sequence,
- (d) an internal ribosome entry site, and
- (e) a reporter gene; wherein said reporter gene is not operably linked to a promoter in said nucleic acid, or

- (a) a splice acceptor site;
- (b) a negative selection marker, wherein said negative selection marker is operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell;
- (c) a reporter gene;
- (d) a translation stop sequence;
- (e) a promoter; and
- (f) a positive selection marker; or

(a) a splice acceptor site;

(b) an internal ribosome entry site;

(c) a cassette including in any order a reporter gene and a negative selection marker, wherein said reporter gene and negative selection marker are operably linked to regulatory elements of a host cellular gene after said nucleic acid is contacted with a cell;

- (d) a translation stop sequence;
- (a) a yeast promoter; and
- (b) a positive selection marker.

57. (Previously presented) The nucleic acid of claim 53 or 56, further including a nucleic acid segment encoding a transactivator polypeptide.

58. (Previously presented) The nucleic acid of claim 53 or 56, further including one or more recombinase signal sequences.

59. (Previously presented) The nucleic acid of claim 53, further including a prokaryotic promoter operably linked to said positive selection marker in 5' to 3' orientation,

- (a) a splice acceptor site;
- (b) a cassette including, in any order, a negative selection marker and a positive selection marker;
- (c) a translation stop sequence,
- (d) an internal ribosome entry site, and
- (e) a reporter gene; or

- (a) a splice acceptor site;
- (b) a negative selection marker;
- (c) a reporter gene;
- (d) a translation stop sequence; and
- (e) a positive selection marker;

wherein said positive selection marker is operably linked to a prokaryotic promoter.

60. (Previously presented) A nucleic acid including a positive selection marker, a negative selection marker, and a nucleic acid segment encoding a transactivator polypeptide, wherein said positive selection marker and said negative selection marker are operably linked to a host cellular gene after said nucleic acid is contacted with a cell.

61. (Previously presented) A nucleic acid including a splice acceptor site, a positive selection marker, a negative selection marker, and a recombinase signal sequence, wherein said positive selection marker and said negative selection marker are operably linked to a host cellular gene after said nucleic acid is contacted with a cell.

62. (Canceled)

63. (Currently amended) A vector that includes the nucleic acid of claim 53, 56, 59, 60, or 61, or 62.

64. (Original) The vector of claim 63, which is a retroviral vector.

65. (Original) The vector of claim 63, further including an integration sequence.

66. (Original) A cell including the vector of claim 63.

67. (Original) The cell of claim 66, responsive to one or more stimulatory agents.

68. (Currently amended) A cell including (i) a first nucleic acid which includes a positive selection marker, a negative selection marker, and a nucleic acid segment encoding a transactivator polypeptide and (ii) a second nucleic acid which includes a promoter operably linked to a responsive element that is directly responsive to said transactivator polypeptide.

69-78. (Canceled)

79. (Previously presented) The nucleic acid of any one of claims 53, 56, 59, 60, or 61, wherein said negative selection marker is selected from the group consisting of Hprt, gpt, HSV-tk, diphtheria toxin, ricin toxin, and cytosine deaminase.

80. (Previously presented) The nucleic acid of any one of claims 53, 56, 59, 60, or 61, wherein said positive selection marker is neomycin resistance, hygromycin resistance, histidinol resistance, xanthine utilization, Zeocin resistance, bleomycin resistance, or the presence of green fluorescence protein.

81. (Previously presented) The nucleic acid of any one of claims 53, 56, or 59, wherein the reporter gene encodes an enzyme.

82. (Previously presented) The nucleic acid of claim 81, wherein said enzyme is selected from the group consisting of secreted alkaline phosphatase, β -galactosidase, luciferase, and green fluorescent protein.